

Abstract

The invention is directed to an apparatus and methods for enhancing the energy efficiency of a variable speed drive (VSD) used to control an elevator by disconnecting the VSD from the AC power supply grid when the elevator is idle and reconnecting the VSD when the elevator becomes active. One embodiment of the invention comprises an alternating current power supply grid, one or more variable speed drives, contactors connected between the alternating current power supply grid and the variable speed drive(s) that are used to connect or disconnect the variable speed drive(s) from the alternating current power supply grid, and, a control system that controls the contactors. The contactors may comprise a coil which is powered by the control system to either connect or disconnect the VSDs and the AC power supply grid.